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AGO D/A ltr, 29 Apr 1980

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DEPARTMENT OF THE ARMY
HEADQUARTERS 41ST SIGNAL BATTALION (COMBAT AREA)
APO San Francisco 96238

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SCCVSG-CA

14 May 1966

SUBJECT: Operational Report on Lessons Learned (RCS CSGPO-28 (R1))

THRU: Commanding Officer
2d Signal Group
APO San Francisco 96307

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Assistant Chief of Staff for Force Development
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Washington, DC 20310

1. Reference: United States Army Vietnam Circular 870-1, dated 11 November 1965 with Change 1 dated 1 April 1966.
2. Forwarded herewith is copy one of Operational Report on Lessons Learned (RCS CSGPO-28(R1)) for the period 1 January through 30 April 1966.

FOR THE COMMANDER:

1 Incl
as

Raymond J. Peltier Jr.
RAYMOND J. PELTIER JR
Captain, Signal Corps
Adjutant

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DEPARTMENT OF THE ARMY
HEADQUARTERS 41ST SIGNAL BATTALION (COMBAT AREA)
APO US Forces 96238

AVSC-CA

30 April 1966

SUBJECT: Operational Report on Lessons Learned of the 41st Signal Battalion for Quarterly Period Ending 30 April 1966

Approved.



JAMES G. PELLAND
Lt Colonel, SigC
Commanding



FOREWORD

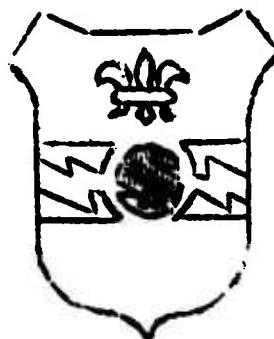
The mission of the 41st Signal Battalion is to provide communications center, switchboard, high frequency radio, and multi-channel communications support for United States military forces and advisors within the I and II ARVN Corps areas of the Republic of Vietnam.¹

The report summarizes the activities of the battalion during the period 1 January 1966 through 31 April 1966

1. See Appendix 4 - Mission Statement

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SECTION I - Significant Organizational Activities

UNIT ORGANIZATION

The 41st Signal Battalion has been retailored by troop unit change request (TUCR) to conform to mission requirements in the Republic of Vietnam, and in its present organization differs considerably from a combat area signal battalion, Table of Organization and Equipment 11-85E.¹

Presently the battalion, including assigned and attached companies, consists of seven line companies and a Headquarters and Headquarters Company.

Company A, 41st Signal Battalion, supports the Central Highlands Region of the II ARVN Corps, US military advisors and US logistical and field units with communication center, high frequency radio, switchboard, and point-to-point multi-channel communication system services.

Company B, 41st Signal Battalion, provides similar support services to the US Army Support Command, Qui Nhon; to other US field units in the Qui Nhon area; to US military advisors and other US field units at Tuy Hoa; and to the Republic of Korea Capital Infantry Division.

Company C, 41st Signal Battalion provides similar support services to the US Army Support Commands at Cam Ranh Bay and Phan Rang; to other US field units in these areas and at Dong Ba Thin; to US military advisors at Song Mao and Phan Thiet; and to the Republic of Korea Marine Brigade at Dong Ba Thin.

Company D, 41st Signal Battalion, is attached for all purposes to the 39th Signal Battalion.

The 178th Signal Company supports US military advisors and US logistical and field units in the I ARVN Corps area with switchboard, high

1. See APPENDIX I - 41st Sig Bn Organization and Function Chart, 30 April 1966

frequency radio, communication center, and point-to-point multi-channel communication system services.

The 228th Signal Company supports the US Army Support Command, Nha Trang; other US field units in the Nha Trang area; and the US military advisors at Duc My with switchboard, high frequency radio, and point-to-point multi-channel communication system services.

The 578th Signal Company (Cable Construction) provides outside plant construction and maintenance functions throughout the battalion's area of responsibility on an assigned mission basis.

The 586th Signal Company provides base communication support services (communication center, switchboard, high frequency radio, and multi-channel carrier systems) to the 1st Cavalry Division (Air-mobile), An Khe; to US military advisors at Phu Cat; to US military advisors in support of the 22d ARVN Infantry Division at Ba Gi; and to US military units in the Phu Thanh Valley near Qui Nhon.²

2. See APPENDIX 2 - 41st Sig Bn Unit Areas of Responsibilities, 30 April 1966; and APPENDIX 3 - 41st Sig Bn Units and Detachments, 30 April 1966

COMMUNICATIONS OPERATIONS

The battalion was operational for a period of 120 days. No changes were made to the assigned mission for this battalion since the previous reporting period.¹ However, during this period, new communications systems were added, existing facilities were expanded, and a general upgrading of all communications was accomplished. In order to meet new commitments, some relocation of battalion assets was made and additional support was furnished by the 2d Signal Group. As of the completion date of this report, the 41st Signal Battalion was providing the following communications:

- 53 Point-to-point 12-channel VHF radio links
 - 1 Emergency backup 12-channel VHF system
 - 5 12-channel cable carrier systems
 - 3 12-channel cable carrier systems with VHF backup
 - 1 Point-to-point 4-channel VHF radio link
- 10 8-channel telegraph carrier systems
 - 5 4-channel telegraph carrier systems
- 4 Minor relay communications centers
- 12 Tributary communications centers
 - 3 600 line common battery switchboards
 - 5 200 line common battery switchboards
- 21 Local battery switchboards
- 27 High frequency radio stations
 - 6 Armed Forces Radio Service Satellite Broadcasting Stations²

1. See APPENDIX 4 - Mission

2. See APPENDIX 5 - Multi-Channel Communication Links, 30 April 1966

On 3 January 1966, the engineers began work on cutting a road to the top of Vung Chua. Vung Chua is located west of Qui Nhon and has an elevation of 560 meters. With the completion of the road and other engineer support on the top of the mountain at the end of February, Vung Chua has been able to grow into one of the largest signal sites in Vietnam. On 1 January 1966, Vung Chua was serving as a radio-relay point for three (3) VHF systems. Presently, Vung Chua terminates sixteen (16) 12-channel VHF systems, two (2) 24-channel tropospheric scatter systems and one (1) 45-channel microwave system. Vung Chua also serves as a circuit control point. Considerable additional communication facilities are planned for Vung Chua in the future.

On 9 January 1966, the 228th Signal Company (RRVHF) was attached to the battalion for all purposes. The 228th Signal Company was assigned the mission of supporting the US Army Support Command, Nha Trang; other US field units in the Nha Trang area; and the US military advisors at Duc My with switchboard, high frequency radio, and point-to-point multi-channel communication system services. C Company, 41st Signal Battalion, was, at the same time, relieved of these missions.

From the end of January to the middle of March, the battalion supported Operation Masher/White Wing by providing entry into the long lines communication system at Qui Nhon and by installing a single side-band net from Bong Son to Qui Nhon in support of an Air Medical Evacuation Company. During February the battalion also supported Operation Moonlight, the movement of certain elements of the 25th Infantry Division into the II Corps area, by providing long lines access and high frequency radio support. During February and March the battalion supported the

1st Brigade, 101st Airborne Division, and the Republic of Korea Marine Brigade at Tuy Hoa in Operation Van Buren. The battalion provided entry into the long lines system and established high frequency and single sideband stations in support of this operation. During Operation Garfield, in March, the battalion operated one terminal of a multi-channel system in support of the 3d Brigade, 25th Infantry Division.

During January and February, three (3) nine-position, six hundred line capability switchboards were installed at Cam Ranh, An Khe, and Qui Nhon. Installation of these switchboards greatly relieved the communications congestion in these areas and has provided much better service to the subscribers. One of the three-position two hundred line switchboards freed by the installation of the larger switchboards has been installed as "Skyking Rear" at An Khe. Another 200 line switchboard has just been shipped to Phu Bai for installation there. A third 200 line switchboard, programmed for installation at Hue, is still in maintenance.

Installation of these new switchboards has necessarily required the upgrading of the cable plants in these areas. Extensive multi-pair cable installations have been made at Cam Ranh, Qui Nhon, An Khe, and Camp Holloway. The lack of hardware has hampered cable construction and maintenance of existing outside plant has been a continuing problem. The pole situation has been eased somewhat since the arrival of 390 poles in March. The lack of properly trained and experienced cable splicers has also hampered cable construction.³

Several new detachments were established during this report period. The first of these new detachments was established at Tour D'Argent (Bagi)

3. See APPENDIX 8 - Summary of Cable Installations for the Period 1 January 1966 through 30 April 1966

on 4 March 1966. This detachment provides communication support to the US advisors at the new base camp area of the 22d ARVN Infantry Division. Another new detachment was formed on 21 March at Dong Ha. The mission of this detachment is to operate the Dong Ha terminal of the Dong Ha-Quang Tri VHF system. A detachment was established at Dong Ba Thin North on 30 March 1966 to provide increased telephone service to the aviation, engineer, and US Field units in the area. Finally, on 28 April 1966, a detachment was formed at Arpre Broye. The purpose of this detachment is to operate the VHF relay and terminal equipment at Arpre Broye.

The addition of several buildings at several sites has helped improve space problems, working conditions and the general quality of communications. The completion of a quonset hut on Vung Chua enabled much equipment to be moved from tents (in which it had been housed for six months) into a good shelter. Further, the quonset hut has provided adequate space for the microwave equipment. On 7 March 1966, a VHF building was occupied at Pleiku. Completion of this facility permitted eight (8) complete systems to be housed in such a manner that only one or two operators are required per shift to operate them. Further, several badly needed pieces of vanized equipment were freed for other uses. Construction of a multi-purpose building at Camp Holloway was begun on 21 March 1966 and should be finished shortly. This building will house Camp Holloway's VHF terminal, new switchboard, and communication center. Finally, the dial central office building at Cam Ranh is well under way and should be completed within another month or two.

AN/TRC-24 and spiral-four carrier systems operated by the battalion have been increased in number. At present the battalion multi-channel

communications links have a total capacity of 736 voice circuits and 100 teletype circuits. Several VHF sites have been improved by the installation of antenna towers. Such towers provide additional antenna elevation, consolidation of antenna fields, more stable antenna support, easier access to the antennas for maintenance, and a more professional appearance to the sites. Towers now exist at Lang Bian Mountain, Vung Chua, Ban Me Thuot, Pleiku, and Cam Ranh. Previously established systems have been improved by relocating terminals to higher ground as it becomes secure and in a few cases by changing operating frequencies.

Both A and C band frequencies are used extensively in battalion VHF systems. Generally speaking, C band frequencies have been found to be most satisfactory for use in the Republic of Vietnam. They provide quieter systems with higher receive levels over a given path than do other VHF frequency bands. C band frequencies have also been effective on obstacle gain systems; C band obstacle gain systems up to sixty miles have been established. The longest A band system operated by this battalion is eighty-three miles.

Establishment of new VHF systems in Vietnam invariably entails movement of one or both terminals to a location accessible only by air and in some cases only by rotary wing aircraft. Frequently, untimely delays are encountered while waiting for a piece of equipment to be transported. Resupply and maintenance problems are seriously compounded by both the relative inaccessibility of many sites and the lack of satisfactory backup equipment on site.⁴

See APPENDIX 6 - LOI's Issued During Period; and APPENDIX 7 - Summary of Operational Activities from 1 Jan 1966 through 30 Apr 1966.

PERSONNEL AND ADMINISTRATION

During the reporting period, the battalion had one additional company attached to it for all purposes. The 228th Signal Company, a radio relay/VHF company, was assigned the mission of supporting the Nha Trang area. The addition of the 228th Signal Company raised the battalion's authorized strength from 1699 officers and men to 1869 officers and men. The 228th Signal Company is authorized 11 commissioned officers and 159 enlisted men.

Personnel shortages have been negligible during the period covered by this report; however, certain military occupation specialties (MOS) have suffered critical shortages. The battalion is presently short 41 radio relay and carrier attendants and 43 switchboard operators.¹

Early on the morning of 20 February, the battalion lost three (3) men while defending the Hon Cong Mountain signal site near An Khe against a Viet Cong attack. On 20 March, one man was wounded while helping to defend the Phan Thiet Airfield against a Viet Cong attack. One pilot is still missing not as a result of hostile action. This pilot was forced to land 8 miles south of Qui Nhon on 15 December 1965.

Individual on-the-job and cross training in related MOS's was accomplished to overcome critical personnel shortages. Refresher training was accomplished in all units as follows:

| | |
|--------------------------------|-------|
| Weapons familiarization firing | 1 hr |
| Code of Conduct | 2 hrs |
| Survival, escape, and evasion | 2 hrs |
| Geneva Convention | 1 hr |

1. See APPENDIX 9 - Personnel Gains and Losses, 3d Quarter Fiscal Year 1966

| | |
|----------------------------|--------|
| Emergency medical care | 2 hrs |
| Generator training | 6 hrs |
| Driver training and safety | 4 hrs |
| Interior guard | 1 hr |
| Weapon safety | 8½ hrs |

AVIATION OPERATIONS

With regard to aircraft and personnel, the battalion aviation section is presently at full strength. The O-1D aircraft which was lost on 15 December 1965 has been replaced as has been the pilot. The pilot of the lost O-1D is still listed as missing.

Aviation utilization figures for the period of the report are as follows:

Total hours flown: 651.2

Number of sorties flown: 1,038

Number of passengers transported: 1,254

Pounds of cargo delivered: 123,900

Early in the morning of 22 March 1966, one of the battalion's O-1's was badly damaged when the Dalat airfield came under attack. Damage to the aircraft was caused by small arms fire and explosive charges. The left wing, the left landing gear and wheel assembly, the propellor, the left side and the left elevator all suffered damages. The aircraft was flown out by maintenance personnel to Nha Trang where it was in maintenance for 11 days.

On 1 April 1966, the U-6A was damaged by small arms fire while in flight between Dong Ha and Quang Tri. Damage was to the engine, the inner and outer firewalls, the right wing, the right aileron, the undercarriage and the tail wheel assembly. The U-6A was in maintenance for 28 days as a result of this incident.

The long standing problem of non-availability of technical publications and forms has recently been alleviated by the arrival of a large shipment of publications; however, the problem of inadequate supply of

maintenance parts continues to plague the section. The low priority assigned to the section's aircraft while in field maintenance also has resulted in a prolonged "down time" of the aircraft.

LOGISTICAL OPERATIONS

Establishment of unit level property books was completed during this quarter. Representatives from the 2d Signal Group and Battalion S-4 sections visited each unit to inspect property records and offer assistance where necessary. Signal equipment previously attached from the 228th Signal Company to other units within the battalion area was laterally transferred to the companies concerned. Units were directed to initiate USARV Form 47 for changes in current operating allowances resulting from these transfers.

Dry storage for equipment sensitive to exposure to the elements continues to be critical. An inventory and relocation of conex containers to the most seriously affected areas has temporarily alleviated the problem. Attempts are being made to obtain sufficient materials so that troop labor can be used to construct storage areas.

The shortage of repair parts has been overcome somewhat through extensive use of the Red Ball system; however, generator and teletype-writer parts continue to be in short supply.

The battalion electronic maintenance section, which is charged with maintenance and repair part support for six companies, established a new consolidated PLL consisting of 5024 line items during the last quarter. This PLL is designed to provide 30-day support capability for the various equipment operated by the battalion.

The receipt and shipment of equipment and personal baggage have increased substantially over the previous quarter. A total of 371 tons were received and processed through the receiving section while 170 tons were processed for shipment to companies throughout the battalion.

These figures represent shipment via US Air Force and Army aircraft and by sea. The effectiveness of the US Air Force carriers, the predominant means of shipment, has increased substantially during the last quarter thus providing more timely and faster service throughout the I and II ARVN Corps areas.

The rapid increase in the number of personnel assigned to the Vung Chua communications site resulted in the necessity for establishing a field mess at that site. Mess equipment and personnel were drawn from battalion sources and work orders have been submitted to the post engineers for improvement of existing facilities.



SECTION • II

PART I - LESSONS LEARNED

ITEM: Unit Tables of Organization and Equipment (Personnel)

DISCUSSION: To accomplish the mission assigned to this battalion, it has been necessary to retaylor nearly every company in the command. In many cases a company which is authorized by its table of organization and equipment (TOE) an excess number of personnel in a particular military occupational specialty (MOS) to accomplish its assigned mission is tasked with attaching its personnel in this MOS to another company which needs personnel of this MOS but is not authorized them by its TOE. The result is an administrative nightmare (numerous attachments of personnel from nearly every company to nearly every other company); yet, it is necessary to continue operating under such an arrangement so that flexibility and responsiveness in an ever changing environment are assured. Moreover, some system must be followed to provide slots for replacements to be requisitioned against. When submitted, it takes from three to nine months to get a modified TOE approved.

OBSERVATION: The time lag required to get a modified TOE approved is unrealistic in a situation such as exists in this battalion. A method of revising each company's TOE should be devised to enable the battalion's companies to reorganize themselves in a timely manner in view of the various missions they are given to accomplish.

ITEM: Granting of Crypto Access (S-2)

DISCUSSION: During the past four months, the battalion has been granted authority to validate security clearances up to and including SECRET. The intent of this action was to speed up the clearance process. However, most personnel whose security clearances are validated by this headquarters also require crypto access to perform their duties. Thus the advantages gained by being able to validate SECRET clearances have been largely nullified since crypto accesses cannot be granted at this level. A considerable amount of administrative time is wasted in preparing paperwork for crypto accesses to be forwarded to higher headquarters. Additional time is lost in getting the paperwork to and from higher headquarters. In all, it frequently takes as long as two weeks to get a crypto access granted.

OBSERVATION: Authority to grant crypto access up to and including SECRET/CRYPTO should be delegated to the battalion level.

ITEM: Frequency Allocation and Control (S-3)

DISCUSSION: During the last four months, vast expansions of communications facilities in the Republic of Vietnam have created numerous problem areas. One of the more important among these areas is the frequency allocation and control measures for AN/TRC-24 VHF radio systems. At present, all VHF frequencies are allocated and controlled for this unit by USARV. In order to effect a change in an existing frequency, requests must be submitted through command channels in accordance with applicable USARV SSI items to USARV. This involves lengthy amounts of "red tape" for a unit operating VHF systems in the magnitude experienced by this battalion. For example, if one of the battalion's systems is interrupted by frequency interference, by the time sufficient information can be obtained to submit a request for a frequency change in accordance with USARV SSI items and can be submitted through command channels (detachment to company to battalion to group to USARV) and by the time the approval/disapproval is returned, many hours, and frequently several days of communications have been interrupted.

Along these same lines, when areas are developed or expanded by the addition of several VHF systems, all terminating at the same location, the frequency bands presently available for the AN/TRC-24 have severe limitations. Bands available for use at present include the 50 to 100 mc band (A band), 100 to 225 mc (B band), and the 225 to 400 mc (C band). Of these frequencies, the band providing generally best results for high system quality is the upper band, 225 to 400 mc. In a complex area where from ten to twenty VHF systems are terminated and the exclusive use of C band is desired, minimum separation of transmit and receive

frequencies plus other types of equipment operating in the same frequency range, i.e., ground to air, ARVN equipment, etc., often saturate this band.

OBSERVATION: In view of the problem areas under discussion above, the following suggestions are made:

(1) Authorize the S-3 sections at battalion level blocks of frequencies to assign for use in their areas. This would provide much better control measures as the battalion S-3's are more familiar with all equipment operated in their respective areas. Further, the battalion S-3 sections are in a much better position to iron out difficulties with other units than are higher headquarters located some 200 miles ~~distance~~ from the problem areas. When changes of frequencies are required, the time factor would be much less. The ABM plan and other recognized methods of frequency engineering could be utilized by the S-3 sections for frequency allocation.

(2) To provide a broader selection of high quality frequencies, it is recommended that some of the higher AN/TRC-24 RF tuners, i.e., 400 to 600 mc (D band), 800 to 1064 mc (F band), and 1350 to 1874 mc (J band), be made available for use. It is also recommended that the AN/TRC-50 be utilized where possible to better utilize the frequency spectrum.

ITEM: Class IV Projects (S-3)

DISCUSSION: This unit is being tasked with handling a great many of the details of various Class IV projects, i.e., procuring land, furnishing building specifications to engineer units, etc. However, we have been provided very little feeder information on these projects, thus making it extremely difficult to take the necessary actions and to provide the necessary specifications to get the project completed in a timely manner. Further, all proposed projects for a given area need to be known by the responsible unit so that sufficient land, buildings and related requirements can be programmed with base development planning boards.

OBSERVATION: When a Class IV project is initiated, all involved units should be furnished a complete set of specifications to include blueprint drawings of proposed buildings. More coordination is needed all along the chain of command on these projects. Specifically, greater coordination is needed between the J-6 and USARV Class IV project officers and the representatives from the various base development planning boards.

ITEM: Dependability and High Performance of AN/TRC-24 VHF Radio Sets (S-3)

DISCUSSION: Since arrival in the Republic of Vietnam in June 1965, this battalion has installed, operated, and maintained approximately 65 radio relay links for long line communications utilizing the AN/TRC-24. The majority of these systems have greatly exceeded the designed capability of the AN/TRC-24, i.e., distances up to 83 miles have been spanned, high quality voice and telegraph communications have been provided and system have been installed over mountainous terrain that completely prevented the required line-of-sight transmission paths of the AN/TRC-24.

OBSERVATION: That the AN/TRC-24 will provide reliable communications under many varying circumstances.

ITEM: Additional MOS Training (S-3)

DISCUSSION: The build-up of US and Allied Forces in the Republic of Vietnam has placed a great requirement upon the Signal Corps to provide the necessary communications. The communication network that has been installed in the Republic calls for highly trained personnel to operate and maintain the various types of complex equipment. One such MOS is 31M20/31M40, radio relay/carrier attendant. Presently, personnel selected for training as a 31M receive 8 weeks instruction at Fort Gordon, Georgia, covering the basic installation, operation, and maintenance procedures for tactical radio/carrier equipment. Upon assignment to a unit, these EM must undergo extensive additional MOS training to become proficient operators. Items such as voice/telegraph interfacing, operation of power generators, to include a limited knowledge of troubleshooting and repair methods, and circuit trouble isolation/restoration measures are a part of this additional training. Normally this training can be accomplished through OJT; however, the situation in Vietnam prevents this type training as technically proficient personnel are needed to operate and maintain the vital communications links immediately upon arrival in Vietnam.

OBSERVATION: To better train personnel, the following suggestions are submitted:

(1) The 31M course at Fort Gordon, Georgia, be extended from 8 to 10 weeks. The additional instruction period could be utilized to familiarize the student with the items mentioned above.

(2) That a MOS refresher course be initiated in Vietnam to further train these personnel. This concept has been utilized in USARPUR for the last several years with excellent results.

ITEM: Cable Installation (S-3)

DISCUSSION: In many areas of Vietnam, large engineer construction efforts are under way. At the same time, communications must be provided. As a result of the construction efforts, many communications cables have accidentally been cut by construction equipment, trucks, etc. In order to minimize outages and decrease restoration time, cable should be marked.

OBSERVATION: Since plastic cable tags are practically non-existent in Vietnam, color coding cables with spray paint has been an effective expedient.

ITEM: Control Network (BATCON)

DISCUSSION: With the creation of the Command Communications Control Center Army (CCCCA) on 15 March 1966, a centralized system of controls came into effect. Due to the fact that the regional communications systems in the Republic of Vietnam are being provided by many organizations with different command channels, the need for such a system was clearly indicated. The CCCCCA has proven effective as a unified facilities control and needless duplication of effort has been largely eliminated. It would appear that the need for organizational communications controls is no longer needed. However, this is not the case. Specifically the need for battalion controls (BATCON's) is obvious. In this battalion, BATCON is still tasked with many necessary functions. First, it appraises the commanding officer of the status of communications controlled and operated by this organization. It works in concert with other controls to effect rapid restoration of circuits and systems. Command assistance is provided immediately when required. This is especially true when restoration requires the movement of equipment and personnel. It acts as a central repository for circuit and systems records of which the battalion has control. It supervises outstanding circuit activation orders (CAO's). Finally it serves as a clearing house for higher and subordinate headquarters.

OBSERVATION: (1) Since 15 March 1966, marked improvements have been noted particularly in the area of circuit and system restoration. Circuit and/or system problems are pinpointed faster and restoration, consequently, has been more quickly realized.

(2) The need for a battalion control as a command tool is obvious.

(3) The cumulative effect of the new system coupled with the battalion control has been the creation of a more flexible and stable system of in-country communications.

ITEM: Loss of Turbine Power (Aviation)

DISCUSSION: Operation of turbine powered helicopters in dusty and grassy areas causes a deterioration of available power due to buildup of foreign matter on the turbine blades.

OBSERVATION:

(1) This unit has initiated a daily power check for its turbine powered helicopters and has found that washing the turbine engine every 50 hours of operating time greatly reduces the power deterioration.

(2) This unit is attempting to expedite through supply channels the delivery of bearing filter kits for the air intake to the turbine. These kits will help prevent the induction of grass and leaves into the turbine. This should alleviate the power deterioration problem and also reduce the frequency of engine washing.

ITEM: Model SF 10.0 MD 10 KW Generators (S-4)

DISCUSSION: Due to the large percentage of deadlined SF 10.0 MD 10 KW Generators, a technical representative from Saigon was asked to examine some of the deadlined generators. He found that the painted coating of the wiring leading to the stator was becoming bare due to sand being pulled through the protective cover over the stator and then hitting the wires. Then, moisture and vibration caused the wiring to short.

OBSERVATION: By raising generators of this model five or more feet off the ground, the chance of sand being sucked into the stators has been greatly reduced.

ITEM: Motor Vehicle and Generator Maintenance (S-4)

DISCUSSION: Preventive maintenance on vehicles and generators presents a major problem to commanders at all levels. Replacement personnel of all grades lack adequate training in the proper maintenance procedures outlined in individual equipment technical manuals and TM 38-750. This lack of training has resulted in a significant higher equipment down time on equipment urgently needed to meet extensive communications requirements. Operational commitments tax the unit's capability to provide this additional training in the field.

OBSERVATION: Personnel should be required to be fully aware of operator maintenance requirements prescribed in TM 38-750 and applicable TM's prior to deployment.



SECTION - II

PART II - COMMANDER'S RECOMMENDATIONS

COMMANDER'S RECOMMENDATIONS

Operational requirements placed upon this battalion have committed equipment that is normally considered backup. In addition, the battalion operated at sites widely dispersed and difficult to reach, covering approximately two-thirds of the Republic of Vietnam. Repair parts for many of our common items, particularly teletype equipment, generators and aircraft are, at best, extremely difficult to obtain. These three factors have combined to produce the undesirable effects of prolonged outages and delay in installing systems and circuits. I mentioned this problem in the last Command Report and feel that the problem is of sufficient magnitude to mention again. Over the past four months, the situation has not improved and, in several cases, has further deteriorated. Because of the battalion's mission and the environment in which it must operate, I again recommend authorization of 50% backup for tactical communication equipment and generators.

As mentioned in the lessons learned section of this report, every company in this battalion, with one exception--the 578th Signal Company (Cable Construction)--has been tailored and retailored to enable them to accomplish their assigned missions. This tailoring has been possible only because certain companies have had excesses of personnel in particular military occupational specialties that other companies are short in. These personnel cannot be assigned to the companies for which they work for administrative reasons. (They would be excess to the company by its table of organization and equipment and subject to reassignment away from the battalion, and there would be no slots for replacements to be requisitioned against.) The result is an organization that in

no way resembles any of the tables of organization and equipment or modified tables of organization and equipment that have been authorized for the battalion's companies. Further the administrative problems created by such an organization as this are counter-productive. The real problem, however, lies in the fact that it takes from three to nine months to get a modified table of organization and equipment approved. In the meantime, the companies involved must struggle along under an outdated table of organization and equipment. I recommend that a more rapid method for approving modified tables of organization and equipment be devised. A more rapid method of changing tables of organization and equipment would enable a battalion such as ours to tailor one of its companies whenever it is substantially changed, i.e., the establishment of BATCON, the establishment of courier service, the establishment of new detachments, etc. Such flexibility is necessary to allow a battalion with as complex a mission as this one has to accomplish its mission in a responsive manner.

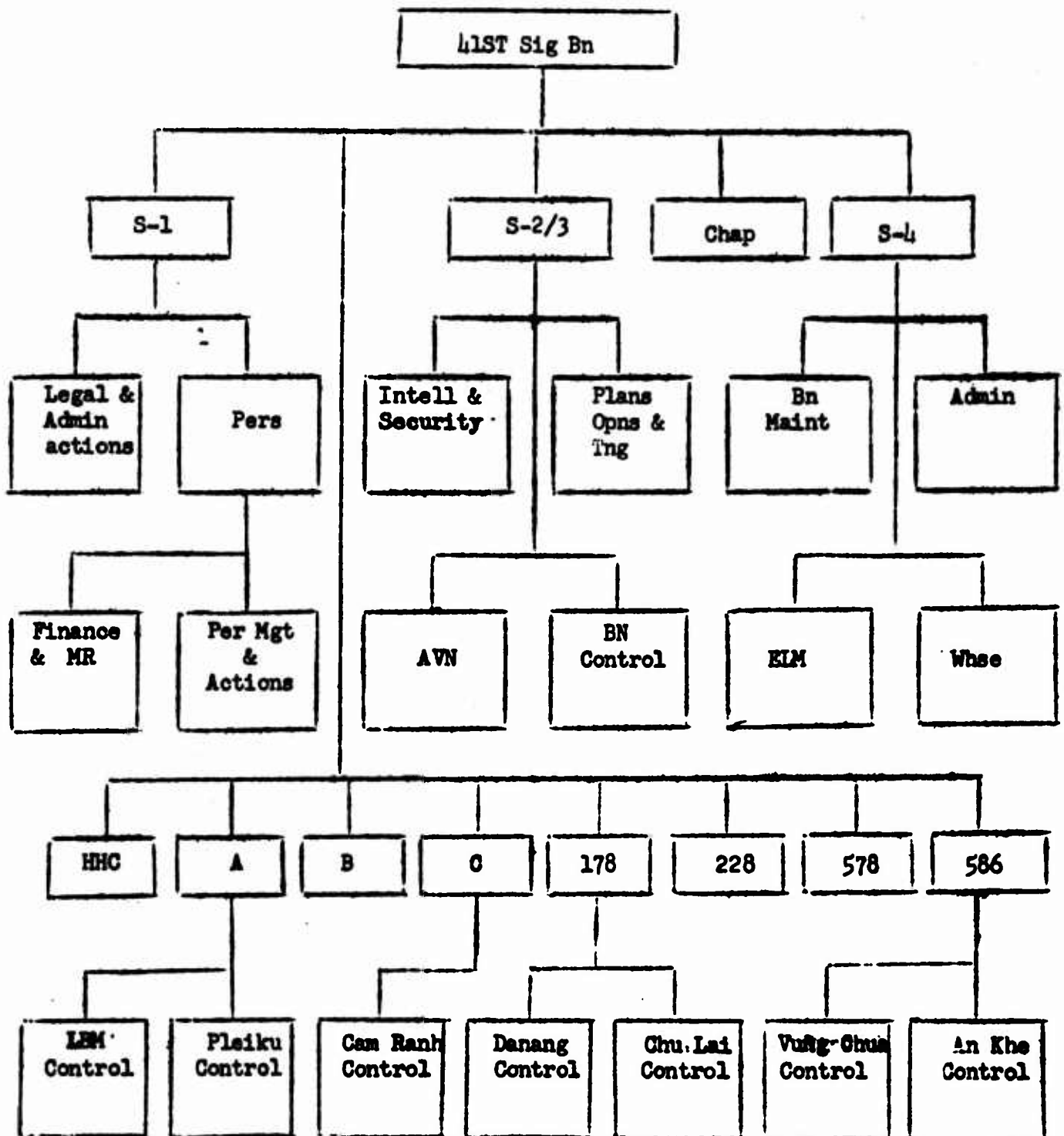
The rapidly increasing number of VHF radio nets and systems, particularly in the II Corps area, is causing growing concern within my battalion. The segment of the frequency spectrum from 50 to 400 mc is rapidly reaching the saturation point in many areas. With the programmed increases in the use of additional VHF equipment and with the expected expansion within the next year or two, it is envisioned that new segments of the frequency spectrum will have to be made available in order to continue to provide quality communications. As more and more high ground becomes secure and system terminals are relocated, the line-of-sight characteristics are becoming better and better. In view of the

above points, I recommend that consideration be given to the use of the D, F, and J bands of the AN/TRC-24 and also that consideration be given to the use of AN/GRC-50 equipment. The use of UHF frequencies (D, F, and J bands and AN/GRC-50) by the units tasked with providing long line and base camp communications should greatly alleviate the frequency congestion problem. Further, it would free a number of VHF frequencies for increased use by units which are unable to operate in the UHF segment of the spectrum due to their missions and the equipment they operate.

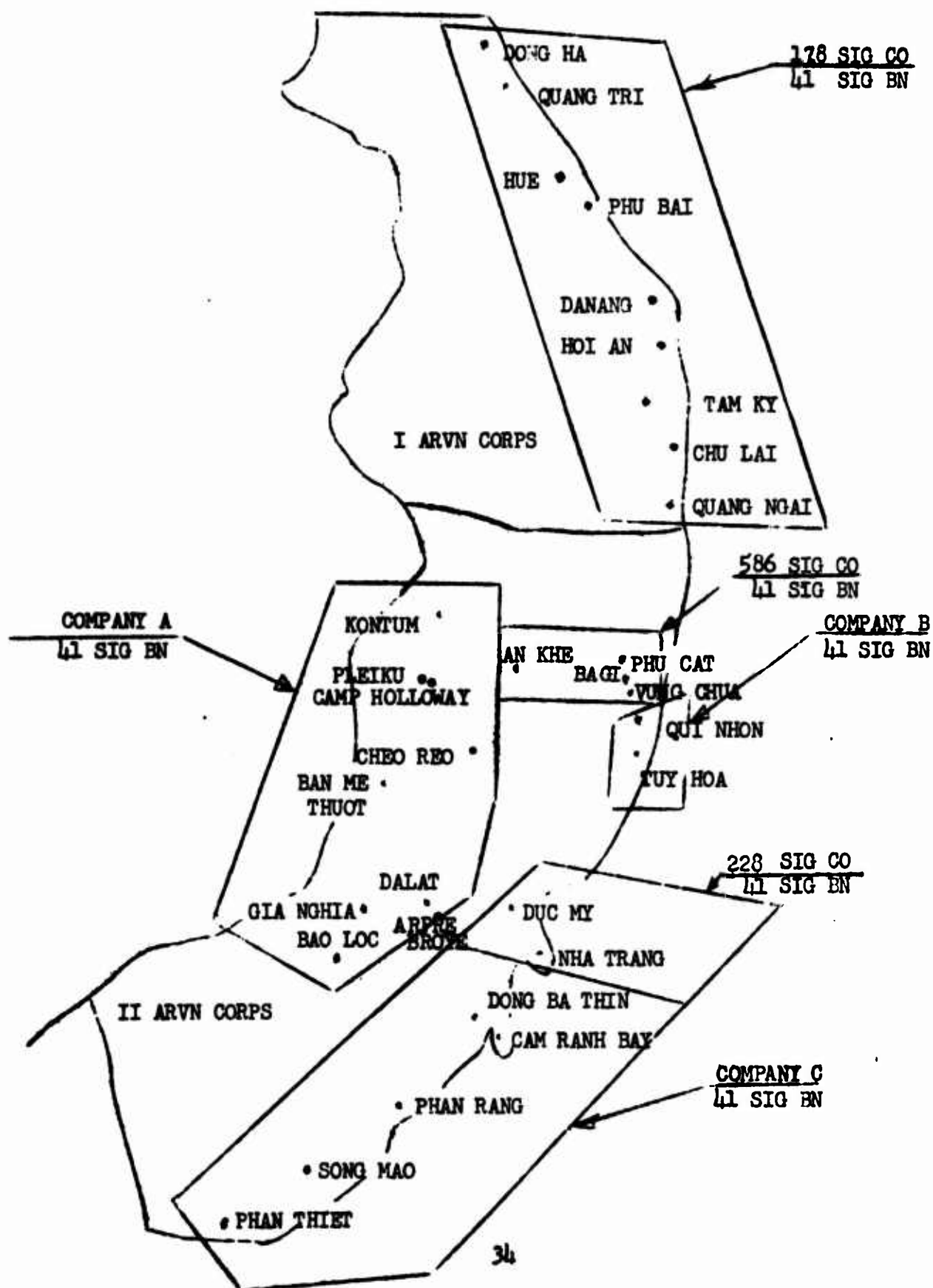


APPENDICES

APPENDIX 1 - 41st Signal Battalion Organization and Function Chart, 30 April 1966



APPENDIX 2 - 41st Signal Battalion Unit Areas of Responsibilities, 30 April 1966



APPENDIX 3 - 41st Signal Battalion Units and Detachments, 30 April 1966

| <u>UNIT/DET</u> | <u>LOCATION</u> | <u>APO</u> | <u>.OO/DET/PHONE</u> | <u>PHONE NR.</u> |
|-------------------|-----------------------|------------|----------------------|-----------------------|
| HQ, 41st Sig Bn | QNH | 96238 | Lt Col Pelland | QNH 628 |
| HHC, 41st Sig Bn | QNH | 96238 | Capt Young | QNH 643 |
| A Co, 41st Sig Bn | PKU | 96295 | Capt Losch | PKU 4260/4261 |
| Det 1, A Co | HLY | 96318 | Lt Richards | HLY 41 |
| Det 1A, A Co | 3/25 | 96295 | SSG Puckett | LAVA (69th Sig) |
| Det 2, A Co | COR | 96295 | SGT Gilbert | COR 11 |
| Det 3, A Co | GIA | 96314 | SFC Gearhart | 41st Sig |
| Det 4, A Co | KTM | 96499 | Capt Wilbanks | KTM 11 |
| Det 5, A Co | DLT/LEM | 96314 | Capt Russo | 41st Sig or DLT 22 |
| Det 5A, A Co | BOL | 96314 | SGT Lamache | 41st Sig |
| Det 5B, A Co | ARPRE BROYE | 96314 | SSG Street | DLT 22 |
| Det 6, A Co | BMT | 96297 | Capt Sharp | BMT 10 |
| B Co, 41st Sig Bn | QNH | 96238 | Capt Bouey | QNH 650 |
| Det 1, B Co | ROK | 96238 | SGT Clay | MENG HO 400 |
| Det 2, B Co | THA | 96316 | SGT De Kort | THA SWBD |
| C Co, 41st Sig Bn | CRB | 96312 | Capt Hynes | CRB 146 |
| Det 3, C Co | DBT | 96312 | SSG Sims | DBT SWBD |
| Det 3A, C Co | DBT North | 96312 | SSG Sims | DBT SWBD |
| Det 4, C Co | PTH | 96317 | MSG Miles | PTH SWBD |
| Det 5, C Co | MY CA CRB AFB | 96312 | Capt Hynes | CRB 146 |
| Det 6, C Co | PRG | 96321 | SSG Kay | PRG SWBD |
| Det 8, C Co | MUK LUK (HILL 184) | 96312 | Capt Hynes | CRB 146 |
| Det 9, C Co | ADA CRB | 96312 | Capt Hynes | CRB 146 |

APPENDIX 3 (cont) - 41st Signal Battalion Units and Detachments, 30 April 1966

| <u>UNIT/DET</u> | <u>LOCATION</u> | <u>APO</u> | <u>CO/OIC/NGOIC</u> | <u>PHONE NR.</u> |
|-----------------|-----------------|------------|---------------------|------------------|
| 178th Sig Co | DNG | 96337 | Maj Davis | DNG 6184/6367 |
| Det 1, 178th | HUE | 96258 | Capt Herrity | HUE 12 |
| Det 1A, 178th | PHB | 96308 | SSG Briggs | PHB SWBD |
| Det 1B, 178th | QTR | 96258 | SGT Hockett | QTR SWBD |
| Det 1C, 178th | DHA | 96258 | SGT Hockett | QTR SWBD |
| Det 2, 178th | QNG | 96260 | Lt Williams | QNG 10 |
| Det 2A, 178th | CHL | 96602 | Lt Woods (362d) | VALVE 252 |
| Det 2B, 178th | TMY | 96260 | SGT Wyke | TMY SWBD |
| Det 3, 178th | DNG | 96337 | Maj Davis | DNG 6184/6367 |
| Det 4, 178th | HAN | 96337 | Lt Frank | HAN SWBD |
| 228th Sig Co | NHA | 96240 | Capt Laramore | Goldfinch 884 |
| Det 1, 228th | HAN | 96337 | *** | *** |
| Det 2, 228th | TMY | 96260 | *** | *** |
| Det 3, 228th | CRB | 96312 | *** | *** |
| Det 4, 228th | BOL | 96314 | *** | *** |
| Det 5, 228th | QNH | 96238 | *** | *** |
| Det 6, 228th | QNH | 96238 | *** | *** |
| Det 7, 228th | DLT | 96314 | *** | *** |
| Det 8, 228th | DLT | 96314 | *** | *** |
| Det 9, 228th | DCM | 96240 | SGT Tyler | DCM SWBD |
| Det 10, 228th | CU CHI | 96307 | *** | *** |
| Det 11, 228th | BIEN HOA | 96227 | *** | *** |
| Det 12, 228th | BIEN HOA | 96227 | *** | *** |
| 578th Sig Co | PTV | 96238 | Capt Warnack | PT 600/640 |

APPENDIX 3 (cont) 41st Signal Battalion Units and Detachments, 30 April 1966

| <u>UNIT/DET</u> | <u>LOCATION</u> | <u>APO</u> | <u>CO/OIC/NCOTC</u> | <u>PHONE NR.</u> |
|-----------------|-----------------|------------|---------------------|------------------|
| 1st Plat, 578th | PTV | 96238 | Capt Warnack | PT 600/640 |
| 2d Plat, 578th | PTV | 96238 | Capt Warnack | PT 600/640 |
| 3d Plat, 578th | CRB | 96312 | Lt Lebeaune | CRB 113 |
| 586th Sig Co | ANK | 96490 | Capt Lemere | ANK 112 |
| Det 1, 586th | PTV | 96238 | Lt Kacsmar | PT 606 |
| Det 2, 586th | PHC | 96238 | SGT Ferguson | PHC SWBD |
| Det 3, 586th | VCM | 96238 | Lt Dick | QNH LD VCM |
| Det 4, 586th | ROK | 96238 | SGT Deitch | MENG HO 300 |
| Det 5, 586th | HCM | 96490 | SP4 Kiely | ANK 684 |
| Det 6, 586th | QM ANK | 96490 | SGT Johnson | ANK-LIMBO |
| Det 7, 586th | QNH | 96238 | SGT Coons | QNH 620 |
| Det 8, 586th | HOAI AN | 96238 | SP4 Cullen | NONE |
| Det 9, 586th | QNH | 96238 | SP4 Doucette | QNH 385 |
| Det 10, 586th | PKU 3/25 | 96295 | SGT Hess | LAVA 55 |
| Det 11, 586th | BAGI | 96298 | SGT Allen | BAGI SWBD |

*** Detachments are under operational control of another unit.

APPENDIX 4 - Mission

HEADQUARTERS
2ND SIGNAL GROUP
APO US FORCES 96307

ASCV-SG-A

24 June 1965

SUBJECT: Mission Assignment

TO: Commanding Officer
41st Signal Battalion
APO US Forces 96238

The mission of the 41st Signal Battalion is as follows:

a. To provide a Signal Company at Headquarters, I ARVN Corps and at Headquarters, II ARVN Corps.

b. To provide communication center, switchboard, and radio facilities for the United States Forces at Headquarters, I and II ARVN Corps.

c. To provide radio and multi-channel communications for the United States Forces from Headquarters, I and II ARVN Corps to each division and to designate special zones within each corps area.

d. To provide communication center, switchboard and radio communications facilities for the United States forces at each division headquarters and designated special zone.

e. To provide communication center, switchboard, radio and multi-channel communication facilities at two or more logistical support areas located within I and II ARVN Corps areas.

f. To provide command, administrative and logistical supervision over units assigned or attached to the 41st Signal Battalion.

g. To provide other communications support within I and II ARVN Corps areas as directed by Commanding Officer, 2d Signal Group.

FOR THE COMMANDER:

DISTRIBUTION:
CG, USASCV
39th Sig Bn
41st Sig Bn

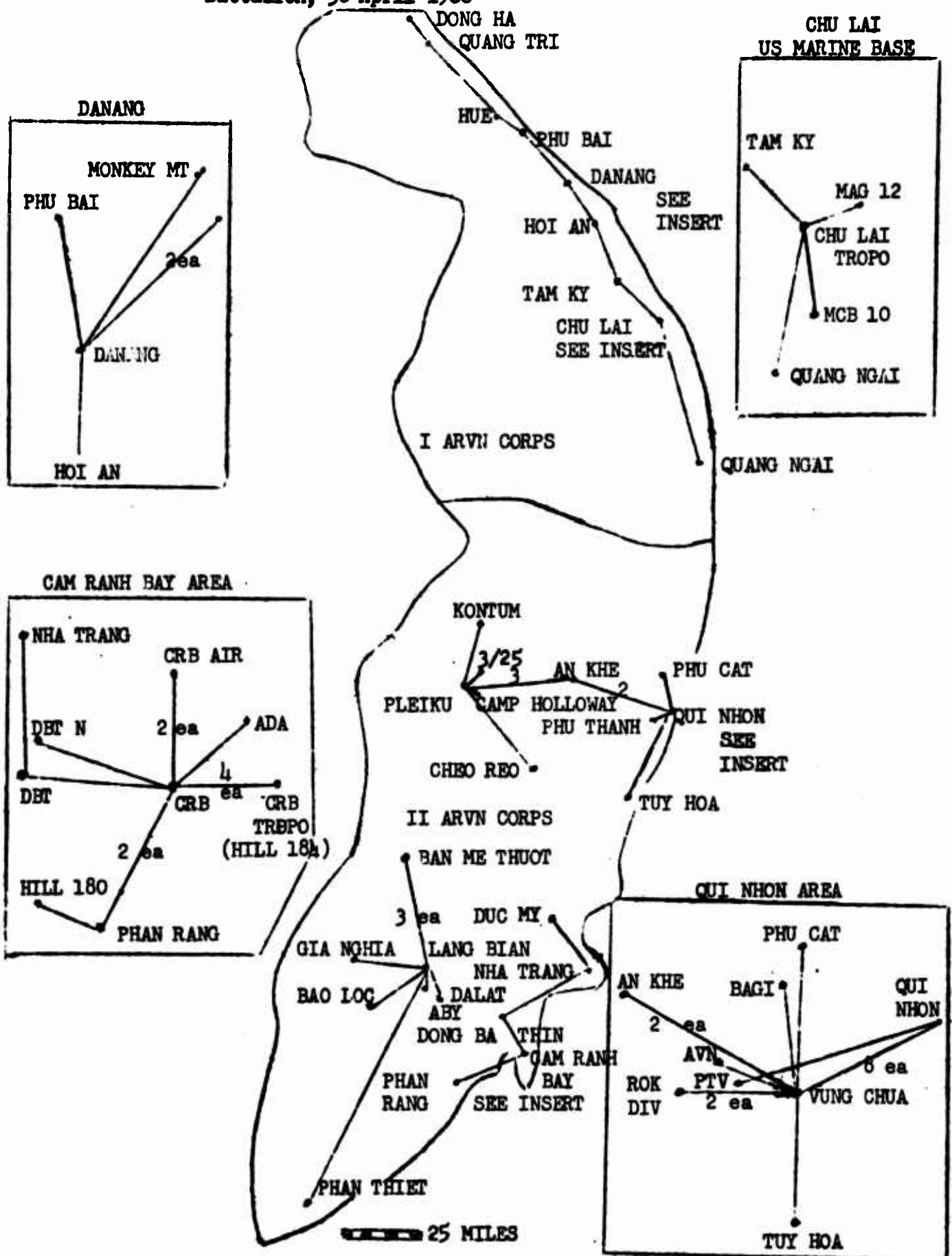
/s/
/t/GERALD P. SMITH
Capt, SigC
Adjutant

38

TRUE COPY

RAYMOND J. FELTIER JR
Captain, SigC
Adjutant

APPENDIX 5 - Multi-channel Communications Links Provided by 41st Signal Battalion, 30 April 1966



APPENDIX 6 - LOI's Issued during Period

| <u>DATE</u> | <u>LOI No.</u> | <u>TITLE OF PROJECT</u> |
|-------------|----------------|--|
| 5 Jan | 1-66 | An Khe Wire Team Support |
| 9 Jan | 2-66 | Cable Installation--Camp Holloway |
| 10 Jan | 3-66 | In-Country SSB Net Crystals |
| 11 Jan | 4-66 | Disestablishment PKU-Holloway VHF System |
| 12 Jan | 5-66 | Securing Corps O&I Net |
| 14 Jan | 6-66 | HF Support for 362d Sig Co |
| 15 Jan | 7-66 | Cable Installation Support Nha Trang |
| 17 Jan | 8-66 | Replacement of HF Equipment |
| 20 Jan | 9-66 | Attachment of 228th Sig Co |
| 24 Jan | 10-66 | Reconfiguration of HF Radio Nets (CONF) |
| 25 Jan | 11-66 | Tactical Circuit/System Reporting Procedures |
| 1 Feb | 12-66 | Installation of VHF QNH-VCM |
| 1 Feb | 13-66 | Switchboard Installation Dong Ba Thin |
| 9 Feb | 14-66 | Outside Plant Installation An Khe |
| 12 Feb | 15-66 | Upgrading Tone Trunk 77UXT7 |
| 14 Feb | 16-66 | SSB Support for White Wing |
| 9 Feb | 17-66 | Schematic Layout of Commo Sites |
| 12 Feb | 18-66 | Equipment Tagging |
| 15 Feb | 19-66 | Communications Support for MOONLIGHT (SEC) |
| 16 Feb | 20-66 | Installation of VHF System, QNH Local-QNH LD |
| 18 Feb | 21-66 | Signal Support for Combined Arms Demonstration |
| 24 Feb | 22-66 | Communications Support, 92d Aviation Co |
| 25 Feb | 23-66 | Installation of Second VHF System CRB-PRG |
| 27 Feb | 24-66 | ROK Radio Support Tuy Hoa |
| 28 Feb | 25-66 | Continued SSB Support for White Wing |
| 4 Mar | 26-66 | Reporting Procedures US Army Communication System Viet Nam |
| 4 Mar | 27-66 | Routing of Systems through Vung Chua--Phase I |
| 5 Mar | 28-66 | Installation of 12-Channel VHF System CRB-DBT North |
| 11 Mar | 29-66 | Installation of Spiral-4 Cable between Quang Tri and Dong Ha |
| 17 Mar | 30-66 | Routing of Systems through Vung Chua--Phase II |
| 17 Mar | 31-66 | TRC-90 Tecon Van Interconnect CRB |
| 19 Mar | 32-66 | CRB MRC-98-TRC-29 Interconnect |
| 21 Mar | 33-66 | MACV Information Structure |
| 21 Mar | 34-66 | SSB Antenna Tests |
| 21 Mar | 35-66 | Install VHF System QTR-DHA |
| 23 Mar | 36-66 | Movement of TRC-129 Equipment |
| 23 Mar | 37-66 | TRC-29 Interconnect CRB |
| 25 Mar | 38-66 | Establishment of 2 VHF Systems CRB--77UH2S 77UH2T |
| 27 Mar | 39-66 | Installation of AN/TCC-4 NHA-PHB |
| 28 Mar | 40-66 | Upgrading QNH Outside Plant |
| 2 Apr | 41-66 | Subscriber Listing for DCO |
| 2 Apr | 42-66 | BMT Cable Installation |
| 2 Apr | 43-66 | VHF System VCM-AVN |
| 6 Apr | 44-66 | TRC-29 VCM-QNH Tropo |

| <u>DATE</u> | <u>LOI No.</u> | <u>TITLE OF PROJECT</u> |
|-------------|----------------|---|
| 10 Apr | 45-66 | SSB Command Net |
| 12 Apr | 46-66 | CRB Microwave Systems |
| 14 Apr | 47-66 | Relocation QNH CommCenter |
| 17 Apr | 48-66 | Installation of 12-Channel System LBM-ABY-PRG |
| 21 Apr | 49-66 | Relocation of Radio Stations |
| 21 Apr | 50-66 | SSB Radio Support |
| 22 Apr | 51-66 | Routing of Systems through Vung Chua--Phase III |
| 22 Apr | 52-66 | Activation of TRC-24 Systems |
| 26 Apr | 53-66 | TRC-129 and TRC-132 Termination ABY |
| 28 Apr | 54-66 | Spiral-4 Installation ABY |
| 30 Apr | 55-66 | Installation of Idle Line Termination Network |
| 30 Apr | 56-66 | Cable Installation FFV-1 to MACV Sector HQ |

APPENDIX 7 - Summary of Operational Activities from 1 Jan 66 thru 30 Apr 66

| <u>DATE</u> | <u>JAN 66--SUBJECT</u> | <u>41ST LOI #</u> |
|------------------------|--|-------------------|
| 6 JAN 66 | Installed third 12-channel VHF system from BMT to LBM | 142-65 |
| 10 JAN 66 | Upgraded switchboards at QTR and TMY from SB-22's to SB-86's | |
| 11 JAN 66 | Installed MTC-9 switchboard at ANK | 138-65 |
| 11 JAN 66 | Disestablished one 12-channel VHF system from PKU to HLY | 4-66 |
| 24 JAN 66 | Installed 12-channel VHF system from QNH to VCM in support of Operation Masher. 54th Sig Bn operating VCM terminal | 12-66 |
| 24 JAN 66 | Replaced GRC-46 with GRC-26D at QNH for II Corps O&I Net. | 8-66 |
| 26 JAN 66 | Installed MTC-9 at CRB | 138-65 |
| 26 JAN 66 | I Corps O&I Net secured for OLC operations | 5-66 |
| 26 JAN 66 | Moved AN/GRC-26 in support of 362d Sig Co from NHA to DLT | 6-66 |
| 27 JAN 66 | Relocated PKU terminal of 12-channel VHF system ANK-PKU in support of 3/25th Inf Div | |
| <u>FEB 66--SUBJECT</u> | | |
| 5 FEB 66 | Established KWM-2 SSB net from QNH to Bong Son in support of Operation White Wing | 16-66 |
| 5 FEB 66 | Installed MTC-1 at Sky King Rear (ANK) | 138-65 |
| 5 FEB 66 | Upgraded DCM switchboard with SB-86 | |
| 9 FEB 66 | II Corps O&I Net secured for OLC Operations | 5-66 |
| 10 FEB 66 | Provided signal support for combined arms demonstration at Duc My. | 21-66 |
| 10 FEB 66 | Installed SB-86 at DBT | 31-66 |
| 12 FEB 66 | Installed MTC-9 at QNH Local | 138-65 |
| 13 FEB 66 | Upgraded tone trunk TSN-QNH from 4 to 8 channels | 15-66 |
| 17 FEB 66 | Installed 12-channel VHF system from QNH LD to QNH Local | 20-66 |

| <u>DATE</u> | <u>FEB 66--SUBJECT</u> | <u>41ST LOI #</u> |
|------------------------|--|-------------------|
| 18 FEB 66 | Installed HF Radio net in the QNH area using AN/CRC-19's in support of Operation Moonlight | 19-66 |
| 27 FEB 66 | Relocated CRC-26 and KWM-2 from DBT to THA in support of 2d ROK Marine Bde. | 24-66 |
| <u>MAR 66--SUBJECT</u> | | |
| 1 MAR 66 | Installed 12-channel VHF system from QNH to VCM, and 12-channel VHF system from VCM to THA plus installed SB-86 at TDA in support of relocating the 22d ARVN Division. from QNH to TDA | 27-66 |
| 3 MAR 66 | Installed SB-611 at ANK | 135-65 |
| 6 MAR 66 | Installed second 12-channel VHF system from CRB to PRG | 23-66 |
| 7 MAR 66 | Completed Phase I of rerouting all systems through VCM. The following actions were taken: (1) Relocated patching panel SB-675 on VCM previously operated by the 54th Sig Bn. Panel is now being jointly operated by both the 41st and 54th Sig Bns to control and maintain all circuits that will be routed via VCM (2) Established a 12-channel VHF system from Capital ROK Div. to QNH local via radio relay at VCM. Disestablished cable carrier system 77URV1 and routed all circuits over new VHF system. (3) Disestablished Capital Relay. Connected Spiral 4 cable systems 77URV5 (QNH Local to Capital Relay) and 77URV2 (Capital relay to Capital) | 27-66 |
| 12 MAR 66 | Provided cable interconnect for installation of STRATCOM. Control Van at CRB. | 31-66 |
| 17 MAR 66 | Converted 2 ea 12-channel VHF system from CRB to Hill 184 to spiral-4 cable carrier systems. | 32-66 |
| 19 MAR 66 | Installed 12-channel VHF system from CRB to DBT North | 28-66 |
| 20 MAR 66 | Installed 2 ea spiral-4 cable runs from QTR-DHA | 29-66 |
| 21 MAR 66 | Completed phase II of rerouting all systems thru VCM. The following actions were taken: | 30-66 |

DATEMAR 66--SUBJECT41ST LOI #

- (1) Installed 12-channel VHF system from QNH Local to VCM.
- (2) Installed 12-channel VHF system from VCM to Capital.
- (3) Disestablished cable carrier system 77URV2 (QNH Local-Capital) and routed all circuits over new VHF systems via VCM.
- (4) Reterminated 12-channel VHF system 77UH90 (QNH tropo to Phu Cat), from Phu Cat-QNH tropo to PHC-VCM. Installed 12-channel VHF system from VCM to QNH tropo
- (5) Reterminated 12-channel VHF system 77UHM2 (THA to QNH LD) from THA-QNH LD to THA--VCM. Installed 12-channel VHF system from VCM to QNH LD.

| | | |
|-----------|--|-------|
| 22 MAR 66 | Installed 4-channel VHF system from QTR to DHA | 35-66 |
| 26 MAR 66 | Installed 2 ea 12-channel cable carrier systems from CRB to Hill 184 | 38-66 |

'APR. 66--SUBJECT

| | | |
|--------------|---|--------|
| 5 APR 66 | Completed installation of MTC-1 SWBD at ANK East. | |
| 10 APR 66 | Installed 12-channel VHF system from VCM to AVN units in PTV. | 43-66 |
| 17 APR 66 | Eliminated Penguin SWBD and routed all subscribers to QNH Local SWBD | 40-66 |
| 23 APR 66 | Completed installation of SP-611 at Chu Lai. | 135-65 |
| 24 APR 66 | QNH Army Comm Center relocation from Compound No 1 to vicinity of US Army Spt Gnd (85th Evac Hospital area) | 47-66 |
| 28 APR 66 | Installed 12-channel VHF system from LBM to Arpre Broye. | 48-66 |
| 28-30 APR 66 | Routing of systems through Vung Chua, Phase III. The following actions were taken: | 51-66 |
| | (1) Installed 12-channel VHF system from VCM to QNH Local | |

DATE

APR 66--SUBJECT

41ST LOI #

(2) Demodulated 12-channel VHF system ROK-QNH at VCM. Installed 12-channel VHF system VCM to QNH Local.

(3) Demodulated 2 ea 12-channel VHF systems ANK-QNH to ANK-VCM. Routed all circuits over newly established 45-channel microwave system, VCM to QNH tropo.

APPENDIX 8 - Summary of Cable Installations for the period 1 Jan 66-30 Apr 66

QUI NHON AREA

- JAN 66** Installed 4,500 feet of 100-pair cable from Qui Nhon Depot Area (QNH Local SWBD) to 394th Transportation Bn (Aerial).
- Installed 9,000 feet of 100-pair cable from Qui Nhon Local SWBD to Qui Nhon Air Field (Aerial).
- Installed 12,000 feet of 26-pair cable from Qui Nhon Local SWBD to 84th Engineer Battalion. (Aerial).
- Installed 4,000 feet of 26-pair cable from Qui Nhon Long Distance SWBD to Qui Nhon Tropo Site (Aerial).
- Installed 4,500 feet of 5-pair cable from 84th Engineer Battalion to Qui Nhon Ammo Dump (Aerial).
- FEB 66** Installed 1,500 feet of 5-pair cable from Qui Nhon Local SWBD to Qui Nhon Support Area (Aerial).
- Installed 3,000 feet of 100-pair cable from Qui Nhon Local SWBD to Qui Nhon Depot Area. (Aerial).
- Installed 1,500 feet of 100-pair cable from Qui Nhon Local SWBD to Qui Nhon Depot Rd (Aerial).
- Installed 500 feet of 26-pair cable from Qui Nhon Support Area to 92d Aviation BOQ (Aerial).
- Installed 1,000 feet of 26-pair cable from Qui Nhon Local SWBD to 85th Evacuation Hospital. (Aerial).
- Installed 1,400 feet of 26-pair cable from Qui Nhon Local SWBD to Headquarters, 41st Signal Battalion (Aerial).
- Installed 3,000 feet of 5-pair cable from Qui Long Distance to MACV II ALC. (Aerial)
- APR 66** During the month of April the following amounts of multi-pair cable were installed for the Qui Nhon outside cable plant:

| <u>TYPE</u> | <u>AMOUNT (feet)</u> |
|-------------|----------------------|
| 600-pair | 1,000 |
| 400-pair | 5,200 |
| 300-pair | 1,600 |
| 200-pair | 2,300 |
| 100-pair | 28,400 |
| 50-pair | 2,000 |
| 5-pair | 9,000 |

CAM RANH BAY AREA

- JAN-FEB 66 Installed 30,000 feet of 26-pair cable in the Cam Ranh Bay area. (Aerial)
- MAR 66 Installed 2,150 feet of 26-pair cable interconnecting facilities at Hill 184.
- APR 66 Installed 4,410 feet of 200-pair cable in the Cam Ranh Support Area connecting facilities.
- Installed 10,820 feet of 26-pair cable interconnecting Signal facilities at Hill 184 and the Cam Ranh Bay Support Area.

AN KHE AREA

- JAN 66 Installed 16,000 feet of 5-pair cable (Aerial) providing local telephone service to 1st Cav Div.
- FEB 66 Installed 1,000 feet of 26-pair cable to the 1st Cav Spt Cnd.
Installed 6,000 feet of 26-pair cable to the MASH Hospital Area.
Installed 6,000 feet of 26-pair cable to the An Khe CommCenter.
- MAR 66 Installed 1,500 feet of 26-pair cable to underground DTOC area. (Buried)
- APR 66 Installed 18,000 feet of 26-pair cable interconnecting An Khe Signal Center to An Khe Airfield.
Installed 12,000 feet of 26-pair cable in the An Khe East area.

CAMP HOLLOWAY (PLEIKU)

- JAN 66 Installed the following amounts of lead covered cable for Holloway outside cable plant:

| <u>TYPE</u> | <u>AMOUNT (ft)</u> |
|-------------|--------------------|
| 26-pair | 4,500 |
| 11-pair | 5,100 |

- MAR 66 Installed additional cable for Holloway cable plant, as follows:

| <u>TYPE</u> | <u>AMOUNT (ft)</u> |
|-------------|--------------------|
| 100-pair | 4,000 |
| 200-pair | 600 |
| 26-pair | 250 |

TOTAL CABLE INSTALLED FOR THE PERIOD 1 JANUARY 1966 TO 30 APRIL 1966

| <u>TYPE</u> | <u>AMOUNT (ft)</u> |
|-------------|--------------------|
| 600-pair | 1,000 |
| 400-pair | 4,200 |
| 300-pair | 1,600 |
| 200-pair | 7,310 |
| 100-pair | 51,900 |
| 50-pair | 2,000 |
| 26-pair | 111,120 |
| 11-pair | 5,100 |
| 5-pair | 16,500 |
| TOTAL | <u>201,730</u> |

APPENDIX 9 - Personnel Gains and Losses, 3d Quarter, Fiscal Year 1966

During the reporting period the battalion's gains exceed losses by eight (8).

| <u>STRENGTH FIGURES:</u> | <u>OFFICER</u> | <u>WARRANT</u> | <u>ENLISTED</u> | <u>TOTAL</u> |
|--|----------------|----------------|-----------------|--------------|
| Authorized 1 Jan 66 | 57 | 20 | 1622 | 1699 |
| Actual 1 Jan 66 | 59 | 19 | 1621 | 1699 |
| Authorized 30 Apr 66 | 68 | 20 | 1781 | 1869 |
| Actual 30 Apr 66 | 81 | 26 | 1777 | 1884 |
| <u>LOSSES DURING PERIOD:</u> | 40 | 11 | 1127 | 1178 |
| <u>GAINS DURING PERIOD:</u> | 58 | 18 | 1110 | 1186 |
| <u>PERSONNEL IN TRANSIT:</u> (In and Out) | | | | |
| 1 Jan 66 | 1 | 1 | 158 | 164 |
| 30 Apr 66 | 4 | 3 | 136 | 153 |
| <u>PERSONNEL SHORTAGES:</u> | | | | |
| 1 Jan 66 | + | 2 | 1 | |
| 30 Apr 66 | + | + | 4 | |

Shortages of maintenance personnel in the following fields are considered critical as of 30 April 1966:

| <u>MOS</u> | <u>NUMBER SHORT</u> |
|------------|---------------------|
| 31E | 10 |
| 31L | 11 |
| 51L | 6 |
| 52B | 6 |
| 52C | 3 |
| 62B | 2 |

In addition the battalion is currently short 41 31M radio relay and carrier attendants and 43 72C switchboard operators.

APPENDIX 10 - Aviation Utilization, 1 January 1966 to 30 April 1966

| | <u>O-1F</u> | <u>U-6A</u> | <u>UH-1D</u> | |
|--------------------------------------|-------------|-------------|--------------|------------|
| <u>January:</u> | | | | |
| Total hours flown: | 50.1 | 45.5 | 53.3 | |
| Number of sorties flown: | 62 | 53 | 143 | |
| Number of passengers transported: | 51 | 66 | 202 | |
| Pounds of cargo delivered: | 1155 | 5870 | 35130 | |
| <u>February:</u> | | | | |
| Total hours flown: | 49.1 | 25.8 | 40.3 | |
| Number of sorties flown: | 62 | 25 | 97 | |
| Number of passengers transported: | 50 | 28 | 101 | |
| Pounds of cargo delivered: | 550 | 3450 | 22775 | |
| <u>March:</u> | | | | |
| Total hours flown: | 44.1 | 73.2 | 104.3 | |
| Number of sorties flown: | 60 | 79 | 166 | |
| Number of passengers transported: | 36 | 105 | 279 | |
| Pounds of cargo delivered: | 580 | 9430 | 24340 | |
| <u>April:</u> | | | | |
| Total hours flown: | 63.3 | 6.7 | 95.5 | |
| Number of sorties flown: | 84 | 11 | 176 | |
| Number of passengers transported: | 32 | 18 | 286 | |
| Pounds of cargo delivered: | 830 | 1850 | 17940 | |
| Days equipment down for maintenance: | <u>JAN</u> | <u>FEB</u> | <u>MAR</u> | <u>APR</u> |
| O-1F | 12 | 20 | 31 | 18 |
| U-6A | 11 | 11 | 6 | 26 |
| UH-1D | 15 | 41 | 19 | 12 |

SCCVSG-C (14 May 66) 1st Ind
SUBJECT: Operational Report on Lessons Learned (RCS CSGPO-28(R1))

HEADQUARTERS, 2D SIGNAL GROUP, APO San Francisco 96307

19 MAY 1966

THRU: Commanding General, 1st Signal Brigade (USASTRATCOM), APO US
Forces 96307
Commanding General, United States Army Vietnam, ATTN: AVC,
APO US Forces 96307
Commanding General, United States Army Pacific, ATTN: GPOP-MH,
APO US Forces 96307

TO: Assistant Chief of Staff for Force Development, Department of
the Army, Washington, DC 20310

Concur in observations.

FOR THE COMMANDER:

1 Incl
nc

Stanley J. Mega Jr.
STANLEY J. MEGA JR.
Capt, SigC
Adjutant

SCCVOP (14 May 66) 2nd Ind
SUBJECT: Operational Report on Lessons Learned (RCS CSGPO-28(R1))

COMMANDING GENERAL, 1st Signal Brigade (USASTRATCOM), APO US Forces 96307

THRU: Commanding General, United States Army Vietnam, ATTN: AVC,
APO US Forces 96307
Commanding General, United States Army Pacific, ATTN: GPOP-MH,
APO US Forces 96553

TO: Assistant Chief of Staff for Force Development, Department of the
Army, Washington, DC 20310

1. Concur in observations.
2. Items pertaining to matters within this command have been extracted
for study and necessary action.

FOR THE COMMANDER:

1 Incl
nc

Charles J. DeHill
CHARLES J. DEHILL
Colonel, GS
Chief of Staff

AVC-DH (14 May 66)

3d Ind

SUBJECT: Operational Report on Lessons Learned (RCS CSGPO-28 (R1))

HEADQUARTERS, UNITED STATES ARMY, VIETNAM, APO San Francisco 96307

19 JUN 1966

THRU: Commander in Chief, United States Army, Pacific, ATTN: GPOP-MH,
APO 96558

TO: Assistant Chief of Staff for Force Development, Department of the
Army, Washington, D.C. 20310

1. The 41st Signal Battalion's Operational Report on Lessons Learned
is adequate.

2. Reference Section III, Commander's Recommendations:

a. Tactical communication equipment and generators are TOE equip-
ment. Therefore, it is necessary for the unit to request a change to the
TOE or a modification table of organization and equipment (MTOE). Head-
quarters, 2d Signal Group has been notified of this requirement.

b. This headquarters agrees that preparation and processing of
MTOE's requires an inordinately long period of time. Separate action will
be initiated to bring this matter to the attention of higher headquarters.

3. Reference Section II, Lessons Learned: This headquarters delegated
authority to signal battalions to grant secret/crypto access, by letter dated
2 March 1966 as amended on 16 May 1966.

FOR THE COMMANDER:



HENRY L. DENNEY
CWO USA
Asst Adj Gen

GPOP-MH (14 May 66)

4th Ind

SUBJECT: Operational Report on Lessons Learned (RCS CSGPO-28 (R1))

HQ, US ARMY, PACIFIC, APO San Francisco 96558 25 JUL 1966

TO: Assistant Chief of Staff for Force Development, Department of the Army, Washington D.C. 20310

1. The Operational Report on Lessons Learned of the 41st Signal Battalion for the period 1 January - 30 April 1966 is forwarded herewith. This is a highly informative report, the value of which is considerably enhanced by the attachment of carefully selected supporting documents.

2. In general, this headquarters concurs with the basic report and the preceding indorsements, except the commander's recommendation on page 30, lines 10 - 12, which appears to propose that approval of restructuring TOE units should be delegated down to the battalion level. In this connection, this headquarters has the following comments:

a. It is recognized that preparation and processing of MTOE's often requires an inordinately long period of time. However, it is believed that much of the time consumed has resulted from implementation of a new system, the New Army Authorization Documents System (NAADS). Until NAADS has become more responsive, delays in processing MTOE's will undoubtedly continue.

b. Moreover, it should be noted that USARV has met critical requirements for unit modifications through both the emergency MTOE procedure and the temporary issue procedure. In this connection, it is noted that this headquarters has not yet received an MTOE for the 41st Signal Battalion.

c. In summary, the processing of MTOE's on a timely and responsive basis is a NAADS objective. Although this is currently not being accomplished, this headquarters cannot concur in the concept of delegating authority for unit reorganizations to low level units as inferred on page 30 of the basic report.

3. Inasmuch as the 41st Signal Battalion is a USASTRATCOM unit, it is recommended that a copy of the basic report, and indorsements thereto, be furnished USASTRATCOM as soon as possible.

FOR THE COMMANDER IN CHIEF:



Copy furn:
CGUSARV, Attn: AVC-DH

D. A. HARRISON
Capt, AGC
Asst AG